WHAT IS CLAIMED IS:

15

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- 1. A method for the detection of an base sequence of interest in a sample DNA or RNA comprising the steps of:
- (1) contacting a sample DNA or RNA to probe DNAs or
 5 RNAs in an aqueous solution to form a hybridization complex;
 - (2) isolating the hybridization complex;
 - (3) dissociating the hybridization complex to recover the probe DNAs or RNAs; and $\frac{1}{2}$
- 10 (4) identifying the said probe DNA or RNA to detect an base sequence of interest in the sample DNA or RNA.
 - 2. The method according to claim 1, wherein the hybridization is carried out in such a manner that any of the sample DNA or RNA and the probe DNAs or RNAs is not immobilized.
 - 3. The method according to claim 1 or 2, wherein plural kinds of probe DNAs or RNAs are used.
 - 4. The method according to any of claims 1 to 3, wherein the probe DNAs or RNAs are labeled with fluorescent substance.
 - 5. The method according to any of claims 1 to 4, wherein the probe DNAs or RNAs are identified by means of hybridization with a complementary chain DNA thereof.
- 6. The method according to claim 5, wherein the complementary chain DNAs or RNAs are immobilized.

18

7. The method according to claim 6, wherein the immobilized complementary chain DNAs or RNA are in a form of a DNA chip.